ABSTRACT OF THE DISCLOSURE

In accomplishing an LC-oscillation VCO circuit which is immune to frequency deviation and a frequency-hopping radio communication apparatus using the VCO circuit, a modulation semiconductor integrated circuit device is designed to control the LC-oscillation VCO directly with data to be transmitted thereby implementing the modulation and switch the carrier frequency for frequency hopping. The integrated circuit device includes a current adjusting circuit which varies the current value of a D/A conversion circuit for producing a control voltage of VCO in accordance with the carrier frequency so that the variation of a modulation control voltage of VCO has a characteristic that is opposite to the characteristic of modulation frequency deviation, thereby nullifying the modulation frequency deviation of VCO.